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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,630	11/13/2001	Edward G. Callway	ATI.0100570	5733
34456	7590	03/07/2006	EXAMINER	
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			NATNAEL, PAULOS M	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/008,630

Applicant(s)

CALLWAY ET AL.

Examiner

Paulos M. Natnael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7,9,11-15 and 17-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-7,9,11-15 and 17-23 is/are allowed.
- 6) ☒ Claim(s) 24,28 and 31-37 is/are rejected.
- 7) ☒ Claim(s) 25-27 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim **28,31** and **33** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims **28** and **31**, the claimed phrase, "the re-sampled pixel" lacks antecedent basis.

In claim **33**, the claimed phrase, "the second source pixel" lacks antecedent basis.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **24,28,32,34-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Betrisey et al. USP # 6,360,023 in view of Admitted Prior Art (APA).

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Considering claim 24, Betrisey et al. (hereinafter, "Betrisey") discloses method of adjusting character dimensions to compensate for low contrast character features. Betrisey teaches "Methods and systems for increasing the contrast with which thin-stemmed characters can be displayed in sub-pixel rendering processes are disclosed. Some fonts, such as Courier New, have relatively thin stems and other character features that would otherwise be rendered with low contrast when displayed using an oversampling process combined with a rendering process that treats individual pixel sub-components as separate luminous intensity sources. In order to avoid such low contrast features and to avoid the need for revising the font itself, the alpha values for the pixel sub-components that correspond to the character features are selectively increased to simulate larger dimensions of the character features and to increase the contrast with which the character dimensions are displayed. The methods involve oversampling image data representing a character by obtaining multiple samples for each of a plurality of pixel sub-components of a pixel. The alpha values associated with pixel sub-components at or near the position of the character features are increased to give the appearance of larger dimensions of the character features and greater contrast in the displayed image. See abstract of the disclosure. In figures 3-5, Betrisey discloses receiving sample image 304, filtering 306 the received image, and clipping 308 which corresponds to normalization (see col. 3, lines 48-64). Furthermore, Betrisey teaches ...The image samples (16 per pixel) 304 are then filtered in step 306 using a box filter to produce a value between 0 and 16 per pixel. Next in step 308, values of 16 are clipped to 15 so that the alpha value for each pixel can be represented using 4 bits. This

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permits the alpha values to range between 0-15 and allows the alpha values to be stored using 4 bits each as opposed to 5 bits which would be needed for the range 0-16. The alpha values produced by clipping step 308, on per pixel, are stored in the font glyph cache 310 as a glyph corresponding to the sampled image. Multiple character glyphs may be stored in the font glyph cache 310. See disclosure in col. 4, lines 22-35. Therefore, Betrisey discloses the claimed subject matter.

As to the claimed absolute alpha value, Betrisey does not specifically use the term absolute. However, generating absolute values from a given value is well known in the art. In that regard, the APA discloses generating absolute alpha values 112 from the input source video. It would have been therefore obvious to the skilled in the art to modify the system of Betrisey by using absolute values in order to process the signal more efficiently.

Considering claims 28 and 32, see rejection of claim 24.

As to claims 34 and 35, see Figs. 8 and 9.

Regarding claim 36, see Fig.6 where it is disclosed an exemplary sampling and filtering method illustrating a scaled image 620.

As to claim 37, Betrisey discloses the system is used within or in a computer system application which uses a scaling subroutine as shown in figures 11 and 12.

***Allowable Subject Matter***

5. Claims **1,3-7,9,11-15,17-20,22,23** allowed.
6. Claims **25-27,29-30** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fushiki, U.S. Patent # 6,480,201 teaches an image storage and processing method that constructs clips and fills shapes in a graphics system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paulos M. Nafael  
Primary Examiner  
Art Unit 2614

March 4, 2006